"Air Education and Training Command – Develop America's Airmen Today...For Tom

Air University
The Intellectual and Leadership Center of the Air
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Behavioral Influences Analysis Center

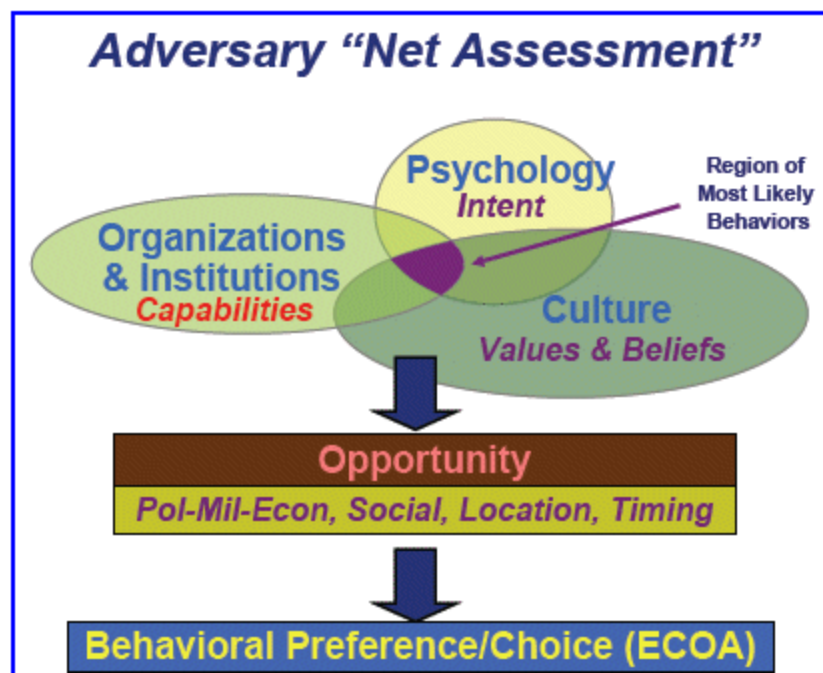see also **Culture and Language Center** and **Negotiation Center of Excellence**

"Analyze to Understand; Assess to Influence"

about us
methodology
projects & events
US gov resources
questions & answers
research & theory
analysis tools
links

18-19 Sep 2007 Conference

see also related centers
research & theory (cyber/info)
influence operations
info-ops reference
culture studies
language
psychology of terrorism

search AU site

Adversary "Net Assessment"

Psychology *Intent*

Region of Most Likely Behaviors

Organizations & Institutions *Capabilities*

Culture *Values & Beliefs*

Opportunity
Pol-Mil-Econ, Social, Location, Timing

Behavioral Preference/Choice (ECOA)

Behavioral Influences Analysis Center

methodology

"Air Education and Training Command – Develop America's Airmen Today...For Tom

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- Overview
- Methodology Description
- Definitions
- Core Questions

- Analytical Workflow

- Motivations
- Threat Assessment
- Summary

- Related References

"Strategy to Tactics: BIA for Actionable Insights on Adversary Behavior"
- Annual BIA Methodology Conference, 18-19 September 2007

please see disclaimer about links, and privacy and security notice ... contact us
page reviewed/updated 23 Aug 07

Overview   return to top

- Behavioral Influences Analysis (BIA) Center Mission Overview Briefing - key slides below

Macro-Context for Behavioral Influences Analysis

PSYCHOLOGY · SOCIOLOGY · HISTORY · GEOGRAPHY
POLITICAL SCIENCE · COMMUNICATIONS

Analyze Adversary Behaviors

Knowledge Domains of Analytical Interest

Behavior

DISCOVERY   Motivations   Influences   DISCOVERY

Cognitive   Decision-Structure

Organizations & Institutions

Networks

Behavioral Influences Analysis Center

analysis & assessment
modeling and simulation
tools

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influence ops
info-ops ref
culture
language
psy of terr

Analyze
Adversar
Behavior

Analyze
Adversar
Behavior

- see also research and theory page

- Overview
- AF Research Lab (AFRL)
- Carnegie Mellon University
- Dartmouth College
- George Mason University
- University of Pittsburgh
- Stanford University

- National Labs

- NetMiner
- SAIC
- UCINET & NetDraw
- Other Tools

- see also research & theory at
  - Cyberspace & Info-Ops Center
    - Social Network Analysis, Social Penetration Theory, Behavioral Modeling, and more
  - Culture & Language Center
  - Gateway to Intelligence
    - Analysis Tools & Theories
    - Threat Analysis
    - Threat Assessment

NOTE: links do not imply any endorsement by any component of the US government.

- see also briefings from 8-9 Mar 2007 BIAC Tools Conference
organizations below with **
briefed and demo'd their tools and/or research at that conference

NOTE: many of the tools below are free
for users in DoD and other US government agencies

BEHAVIORAL INFLUENCES ANALYSIS CENTER
Tools and Methods R&D Partnership Approach

**Air Force Research Laboratory(AFRL) **

- Air Force Research Laboratory(AFRL)
    - AFRL, Human Effectiveness Directorate, Warfighting Interface Division, Cognitive Systems (AFRL/HECS)
    - AFRL, Information Directorate, Command and Control Engineering (AFRL/IFSA)

- Java Causal Analysis Tool (JCAT)
    - JCAT is a tool for the consistent analysis of uncertain causal reasoning. It supports both forecasting (uncertain prediction of future events) and inference from evidence (analysis how observation of modeled events change both our future forecasts, and our understanding of events in the past. It is suitable for analysis of existing studies and plans or as a tool for creating and documenting the reasoning new plans and studies.
    - JCAT is as easy or easier to use than any other Bayesian tool, but, when needed, has unmatched expressive capabilities including elimination of model destroying assumptions of independence, a model of temporal reasoning which includes resource constrained persistence, and the ability to model ensembles of events. It also contains original statistical analysis for rejecting or accepting a causal model based on evidence.
    - JCAT, similarly to other tools, supports different styles of model building, including modeling of beliefs, intentions, etc. of adversarial modeling, and supports Efffects Based Operations (EBO), Influence Operations, and DIME/PMESI models. Example models in all such planning styles already exist as JCAT models.

    - Uncertainty Management with JCAT, slides for presentation by Dr. John F. Lemmer, AFRL/IFSA
        - JCAT is "best thought of as a 'spreadsheet' for uncertainty management"
    - Bayes Theory: Risk and Reward - the JCAT Computational Model, slides for presentation by Dr. John F. Lemmer, AFRL/IFSA

- Predictive Awareness and Network-Centric Analysis for Collaborative Intelligence Assessment (PANACIA)
    - Analysis brings information faster to warfighters, by Savannah, for Air Force Print News, 21 Apr 2006
        - Intelligence, surveillance and reconnaissance analysts are testing the Predictive Awareness and Network-Centric Analysis for Collaborative Intelligence Assessment advanced technology demonstration. The analysis, known as PANACIA, provides integration of mature fusion and reasoning engines to support the warfighter in an AOC weapons system and the Air Force-Distributed Common Ground System.

**Carnegie Mellon University **

- Carnegie Mellon University, Center for Computational Analysis of Social and Organizational Systems (CASOS)
    - includes contact information
    - CASOS Projects - including those below

- Automap - Extract, Analyze and Represent Relational Data from Texts
    - Main functionalities of AutoMap are:
        - Extract, analyze and compare mental models of individuals and groups.

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  - Main functionalities of AutoMap are:
    - Extract, analyze and compare mental models of individuals and groups.
    - Reveal structure of social and organizational systems from texts.

- ORA: Organizational Risk Analyzer
  - ORA is a risk assessment tool for locating individuals or groups that are potential risks given social, knowledge and task network information. Essentially, first you use information about people to "connect the dots." Then, ORA examines this network and finds those dots, those people, who represent a risk to the overall system. Individuals are risks, e.g., if their removal from the network would debilitate it (the critical employee) or if they were to feed false information to others they could create havoc (the rumor monger).

- DyNet - desktop tool for reasoning about dynamic networked and cellular organizations
  - The purpose of the DyNet project is to develop the equivalent of a flight simulator for reasoning about dynamic networked organizations. ... Using DyNet the analyst would be able to see how the networked organization was likely to evolve if left alone, how its performance could be affected by various information warfare and isolation strategies, and how robust those strategies were in the face of varying levels of information assurance.

- DyNetML - Interchange Format for Rich Social Network Data
  - DyNetML is a universal data interchange format to enable exchange of rich social network data and improve compatibility of analysis and visualization tools. DyNetML is an XML-derived language that provides means to express rich social network data. DyNetML also provides an extensible facility for linking anthropological, process description and other data with social networks.

Dartmouth College **

- Dartmouth College, Thayer School of Engineering, Distributed Information and Intelligence Analysis Group (DI^{2}AG)
  - research areas include

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Dartmouth College **

- [Dartmouth College, Thayer School of Engineering, Distributed Information and Intelligence Analysis Group (DI²AG)](#)
  - research areas include
    - Adversary Intent Inferencing (Adversarial Modeling)
      - Emergent Adversary Modeling System
      - War-gaming
    - Deception Detection and Deception Intent Modeling
      - Insider Threat
    - Cultural Behavior Modeling
    - Efficient Distributed Computational Biology (Protein Folding)
    - User Modeling and User Adaptive
      - Intent Inferencing
    - Distributive and Adaptive Information Retrieval
      - Geospatial Information Systems
      - Information Extraction
    - Multi Document and Technology Summarization
    - Real World Cognitive Multitasking's and Problem Solving
      - Modeling Insight and Intuition

George Mason University **

- [George Mason University, Volgenau School of Information Technology and Engineering, System Architectures Laboratory (SAL)](#)
  - includes contact information

- CAESAR III: A tool for Designing, Analyzing, and Evaluating Command and Control organizations and Processes - Based on the theory and algorithms of Colored Petri nets. In addition to modeling monocultural organizations (friendly or adversarial), it can be used to model coalitions
  - [Leaflet](#)

- Pythia: A tool based on various types of Influence nets that can be used for modeling and analysis of effects based operations, for course of action (COA) development and selection, and for effects based assessment. It is also a research platform for the development of algorithms that address temporal issues in COA development and effects based assessment.
  - Leaflet

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  - [Leaflet](#)

- Temper: A tool for representing temporal knowledge and for reasoning about critical incidents , events/activities of interest to identify hidden patterns of temporal relations.
  - [Leaflet](#)

University of Pittsburgh

- [GeNIe and SMILE](#)
  - SMILE (Structural Modeling, Inference, and Learning Engine) is a fully portable library of C++ classes implementing graphical decision-theoretic methods, such as Bayesian net-works and influence diagrams, directly amenable to inclusion in intelligent systems.
  - Its Windows user interface, GeNIe is a versatile and user-friendly development environment for graphical decision-theoretic models.
  - Both modules, developed at the Decision Systems Laboratory, University of Pittsburgh, have been made available to the community in July 1998 and have now several thousand users worldwide.

Stanford University

- [Protégé](#)
  - Protégé is a free, open source ontology editor and knowledge-base framework.
  - Protégé is supported by a community of developers and academic, government and corporate users, who are using Protégé for knowledge solutions in areas as diverse as biomedicine, intelligence gathering, and corporate modeling.

National Laboratories

Stanford University

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National Laboratories

- see also research and theory at Sandia Labs on research page

- Cultural And Media Influences on Opinion (CAMIO) - Oak Ridge National Laboratory (ORNL)
    - The Cultural And Media Influences on Opinion (CAMIO) simulation of group behavior is an agent-based computational model that can be used to examine the opinions; issue stances, political allegiances or other judgments held by members of a particular group within a society and examine how these opinions change or can be influenced to change over time. Of particular interest is changes caused by an external organization such as the international or internal media. CAMIO is a model of how small groups of acquaintances form from larger populations and change over time; how opinions spread throughout the groups; how an outside entity, such as the media, can influence the spread of such opinion; and how this population of small groups may become polarized or unified around a particular issue.

NetMiner

- NetMiner social network analysis tool

- References to and users of NetMiner

SAIC

- Influence Net Modeling
    - Situational Influence Assessment Module (SIAM)
        - "SIAM is designed for Microsoft Windows® XP platforms, and is available for use by organizations within the U.S. Federal government."

        - "SIAM is a powerful software application designed to assist people in analyzing complex problems and issues, especially when empirical information is sparse or uncertain. SIAM can be used in a range of operational situations, from corporate decision making to national security planning."
        - "One of SIAM's most beneficial uses is in the area of analytical collaboration. Analysts, decision makers, corporate strategists, and operational planners with expertise in different disciplines can use SIAM to collaborate on issues which require an understanding of many fields."

**Behavioral Influences
Analysis Center**

research and theory

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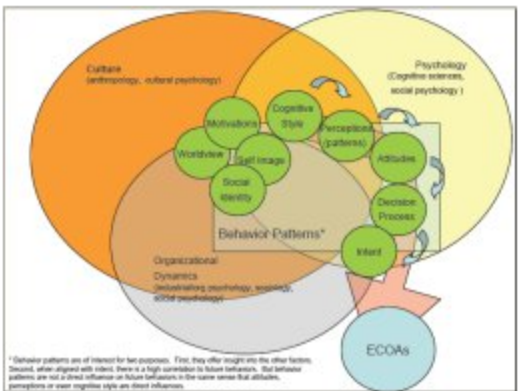
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- see also analysis & assessment tools page

- Overview
- AF Institute of Technology (AFIT)
- AF Research Lab (AFRL)

- MURI (DoD plus universities)
- Carnegie Mellon University
- Dartmouth College
- George Mason University
- University of Maryland
- Other University Research

- Sandia National Labs
- DARPA
- Australian DoD

- see also research & theory at
  - Cyberspace & Info-Ops Center
    - Social Network Analysis,
      Social Penetration Theory,
      Behavioral Modeling, and more
  - Culture & Language Center
  - Gateway to Intelligence
    - Analysis Tools & Theories
    - Threat Analysis
    - Threat Assessment

Adversary Behavior Origins
(click on image for larger version)

Cyberspace & Information Operations Study Center

research & theory

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other centers - strategy & technology | space | culture | terrorism

- Basics and Overviews
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- Who's Doing Research
- Army Research Institute products

- Media Theory
- Surveys, Polling, & Statistics
- Focus Groups
- Symbols & Symbology

- Game Theory
- Behavior Modeling & Analysis
- Insider Threat Models
- Social Network Analysis (SNA)
- Bayesian Inference and Decision Theory

- Evolutionary Cognitive Neuroscience (ECN)
- Chaos Theory
- Rumor Propagation
- Lattice Theory & Formal Concept Analysis
- Collective Intelligence
- Schmitt Analysis

- Uncertainty Reduction Theory
- Social Penetration Theory
- Information Manipulation Theory
- Inoculation Theory
- Borden-Kopp Model
- Shannon's Information Theory
- Metcalfe, Amdahl and Moore

- see also info & cyberwar and other Congressional Research Service reports

- see also Boyd (OODA loop) and effects-based ops theory and other military/strategy theories at the AWC Military Theory page

- see also laboratories page

- see also perception page, especially memes, knowledge representation and semiotics and subliminal perception & priming and reflexive control

- see also influence ops theory and links at top of Influence Operations page

- see also behavioral influences research at Behavioral Influences Analysis Center

- see also psychology of terrorism at the Center for Terrorism Studies

- see also research and theory page, especially
  ⇒ comparisons, behavior, & language theory at the Center for Regional and Cultural Studies

- see also using scenarios at the Future Studies page

- see also data mining & analysis theories

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- social & behavioral research
- cultural lens model

- comparisons

- civil-law vs common

- body language
- psychology

- myths, legends, & folktales
- other sources & topics

see also:

- language theory on this site

- cross-cultural psychology

- research and theory at
  Behavioral Influences Analysis Center (BIAC)

- social penetration theory and others at
  Cyberspace and Info-Ops Study Center theory page
  (use Ctrl-F to search for cultur, thus finding
  references to both culture and cultural)

- influence theory at
  Cyberspace and Information Operations Study Center

- AWC Gateway to Law, including
  - constitutions of the world
  - international law
  - establishing rule of law
  - Islamic law

Social and Behavioral Research Resources   return to top

- behavior modeling and analysis at Cyberspace and Info-Ops Study Center theory page

Social and Behavioral Research Resources

- behavior modeling and analysis at Cyberspace and Info-Ops Study Center theory page

- Behavioral Influences Analysis Center (BIAC), Air University
  - ➡ Behavioral Influences Analysis (BIA) Mission Overview (local copy)
    - ➡ BIA Storyboard (local copy) - how it all fits together
    - ➡ Macro-Context for Behavioral Influences Analysis (local copy) - a chart of the contexts
    - ➡ Glossary (local copy), from the mission briefing
  - Analytical Tools for Behavioral Influences Operations (local copy, 28 Mb), AFRL report by Zywien et al, Dec 2003
    - recommendation section (local copy) - text mining, investigative analysis, and Bayesian tools

- National Air and Space Intelligence Center (NASIC)
  - Behavioral Influences Analysis Division

- USMC Center For Advanced Operational Culture Learning (CAOCL)
  - Cognition in Natural Settings: The Cultural Lens Model, by Klein, 2004 (alternate URL)
  - National Differences in Teamwork, by Klein and McHugh

- Improving Multicultural Teamwork to Combat Terrorism , by Pierce and Dixon, Army Research Laboratory
  - Observations from U.S. deployments to Bosnia are presented within the context of Iraq. In conclusion a review of research projects being led by the U.S. Army Research Laboratory to improve multicultural teamwork is presented.

- Getting Inside the Enemy's Head: The Case for Counteranalysis in Iraqi Counterinsurgency Operations, by Gyves, in *Air & Space Power Chronicles*, Mar 2006

- "Adapt or Die" - The Imperative for a Culture of Innovation in the United States Army (local copy), by Fastabend and Simpson
  - "Culture changes only after you have successfully altered people's actions, after the new behavior produces some group benefit for a period of time."
    - - John Kotter, Harvard Business School

- U.S. Army Research Institute for the Behavioral and Social Sciences
  - Lessons Learned on Collective Efficacy in Multinational Teams (local copy), by Karrasch, Apr 2003
  - International Military Education and Multinational Military (local copy), by Moskos, Jan 2004

- Political Military Analysis Handbook (local copy), by the United States Army John F. Kennedy Special Warfare Center and School, 2004 - includes sixteen factors as a framework for beginning analyses that address operational and planning

- [Political Military Analysis Handbook (local copy)](), by the United States Army John F. Kennedy Special Warfare Center and School, 2004 - includes sixteen factors as a framework for beginning analyses that address operational and planning issues in foreign environments - also includes chapter on methods used to conduct social science research

- [The Importance of Treating Culture as a System: Lessons on Counter-Insurgency Strategy from the British Iraqi Mandate (local copy)](), by Casebeer, Center for Contemporary Conflict, Oct 2005

- [Psychological Influences on the Policy Choices of Secretaries of State and Foreign Ministers](), by Crichlow, *Cooperation and Conflict*, Vol. 40, No. 2, 179-205 (2005)

- [Office of Behavioral and Social Sciences Research (OBSSR)](), National Institutes of Health
- [Behavioral and Social Sciences Interest Group (BSS-IG)](), National Institutes of Health

- [International Network for Social Network Analysis (INSNA)]()
- [*Social Networks*]() - journal published in association with INSNA

- [*The Journal of Applied Behavioral Science*]()

- [Capturing Behavioral Influences in Synthetic C2:What We've Learned So Far and Where We Need to Go](), by Bowen et al, MITRE Corp.

- [Social Networking Analysis: One of the First Steps in Net-Centric Operations (local copy)](), by Edison, in *Defense Acquisition Review Journal*, Aug-Nov 2005

- [Research tools/methods intros by Social Science Automation, Inc]() - includes the following
  - Leadership Trait Analysis (LTA)
  - Operational Code (OpCode)
  - Verbal Behavior Analysis (VBA)
  - Image Theory
  - Cognitive Mapping

- [Cultural Barriers to Multinational C2 Decision Making (local copy)](), by Klein et al, for 2000 Command and Control Research and Technology Symposium

- [Understanding and Using SIAM (local copy)](), by Sands and Hayes, Naval War College, Center for Naval Warfare Studies, Decision Support Department - about the influence net modeling tool called Situational Influence Assessment Module (SIAM)

- Edward T. Hall - A Great Grandfather of Neuro Linguistic Programming (NLP), by Van der Horst

Decision Support Department - about the influence net modeling tool called Situational Influence Assessment Module (SIAM)

- [Edward T. Hall-- A Great-Grandfather of Neuro-Linguistic Programming (NLP)](#), by Van der Horst
  (see also [NLP section on Air War College Gateway to the Internet comm skills page](#))
  - Unbeknownst to many of us, quite a few of the approaches that NLP uses to solve these problems have been inherited from ground-breaking work in the field of the inter-cultural communication (ICC). This field studies the subjective experience of culture as a function of communication separate from, but including the differences in languages.
  - As early as in "*The Silent Language*," Hall said, "Experience is something man projects upon the outside world as he gains it in its culturally determined form."
  - ... Of course, here Hall is talking about modelling. "Man is the model-making organism par excellence..." wrote Hall 16 years later, the same year Bandler and Grinder named NLP. "Grammars and writing systems are models of language... Myths, philosophical systems, and science represent different types of models of what the social scientists call cognitive sytems. The purpose of the the model is to enable the user to do a better job in handling the enormous complexity of life. By using models, we see and test how things work and can even predict how things will go in the future... People are very closely indentified with their models, since they also form the basis for behavior. Men have fought and died in the name of different models of nature."
  - On the first page of this book ["The Silent Language"], Hall begins with two themes-- time and space-- to which he will later dedicated entire books: "The Dance of Life (1983)," and "The Hidden Dimension (1966)."
  - Monochronic and Polychronic Time
    - Hall's first distinctions were between what he calls monochronic and polychronic time. "M-time is one-thing-at-a-time, following a linear form so familiar in the West...an outgrowth of the industrial revolution. Monochronic cultures stress a high degree of scheduling, and an elaborate code of behaviour built around promptness in meeting obligations and appointments.
    - "Polychronic cultures are just the opposite: human relationships and interactions are valued over arbitrary schedules and appointments. Many things may occur at once (since many people are involved in everything), and interruptions are frequent... P-time is polychronic, that is, many-things-at-a-time. P-time is common in Mediterranean and Colonial-Iberian-Indian cultures."
  - High and Low-Context Cultures
    - These two time orientations tend to produce two other significant cultural phenomena: the difference between high and low context cultures. "These terms refer to the fact that when people communicate, they take for granted how much the listener knows about the subject under discussion. In *low-context* communication, the listener knows very little and must be told practically everything. In *high-context* communication the listener is already 'contexted' and so does not need to be given much background information."
    - "Japanese, Arabs, and Mediterranean peoples, who have extensive information networks among family, friends, colleagues and clients and who are involved in close personal relationships, are high-context." says Hall writing with his wife, Mildren Reed Hall, in "*Understanding Cultural Differences*"(1990).
    - "Low-context people include Americans, Germans, Swiss, Scandinavians, and other northern Europeans; they compartmentalize their personal relationships, their work, and many aspects of day-to-day life. Consequently, each time they interact with others they need detailed background information."
  - The Hidden Dimension of Space

they compartmentalize their personal relationships, their work, and many aspects of day-to-day life. Consequently, each time they interact with others they need detailed background information."
- The Hidden Dimension of Space
  - Territoriality
  - Cultural Orientations Toward Sensory Modalities
  - Personal space
- Concept of action chains
  - An action chain is "a term borrowed from animal behavior to describe an interactional process in which one action releases another in a uniform patterned way. Courtship is a rather complex example. Making a date or inviting someone to dinner would be another."
- "An individual cannot thru introspection and Self-examination understand himself or the forces that mold his life, without understanding his culture."
- "Cultures won't change unless everyone changes. There are: neurological-biological-political-economic-historic and Culture-Psychodynamic reasons for this."
- "Culture is dictatorial unless understood and examined."

Cultural Lens Model

- USMC Center For Advanced Operational Culture Learning (CAOCL)
  - Cognition in Natural Settings: The Cultural Lens Model, by Klein, 2004 (alternate URL)

- Cultural Barriers to Multinational C2 Decision Making (local copy), by Klein, Pongonis, and Klein - a DARPA sponsored report, 2000
  - National cultural differences present barriers to successful coalition command and control. The challenge is compounded by distributed decision making that characterizes many operations. If we are to work effectively in coalition operations, we have to understand the complexities presented by national cultural differences. This paper reviews cultural differences that can disrupt situational awareness, decision making, coordination, and communication in multinational coalitions. These differences are in power distance, dialectical reasoning, counterfactual thinking, risk assessment and uncertainty management, and activity orientation.

- Why Culture Matters: an Empirically-Based Pre-Deployment Training Program (local copy), by Chandler, Naval Postgraduate School thesis, Sep 2005
  - Helen Klein (2004) uses eight dimensions in her "Cultural Lens Model" in efforts to help facilitate cognitive cultural awareness:
    Time Horizon,
    Achievement vs. Relationship,
    Mastery vs. Fatalism,
    Tolerance for Uncertainty,
    Power Distance,
    Hypothetical vs. Concrete Reasoning,
    Attribution, and

Power Distance,
Hypothetical vs. Concrete Reasoning,
Attribution, and
Differentiation vs. Dialectical Reasoning.

Comparisons

- See also psychology on this page

- See also storytelling on AWC Gateway to the Internet - storytelling puts context around the message, helping to communicate between high and low context cultures

- See also Edward T. Hall section above, which includes discussion of his
    - Monochronic and Polychronic Time
    - High and Low-Context Cultures
    - The Hidden Dimension of Space
    - Concept of action chains

- ⇒ The Psychology of Worldviews, by Koltko-Rivera, in *Review of General Psychology*, 2004, Vol 8, No. 1 -- excellent summary of many theories, models, and impacts

- USMC Center For Advanced Operational Culture Learning (CAOCL)
    - National Differences in Teamwork, by Klein and McHugh

- Decision Making
    - Cultural Factors in Complex Decision Making, by Strohschneider, in *Online Readings in Psychology and Culture*, Center for Cross-Cultural Research, Western Washington University, Bellingham, Washington USA, 2002
    - Decision Making in Individualistic and Collectivistic Cultures, by Güss, in *Online Readings in Psychology and Culture*, Center for Cross-Cultural Research, Western Washington University, Bellingham, Washington USA, 2002

- Combating Terrorism Center (CTC) at West Point
    - Militant Ideology Atlas
    - Paradigmatic Jihadi Movements

- *The Quranic Concept of War*, by Pakistani Brig. Gen. S. K. Malik, originally published in Lahore, Pakistan in 1979
    - Review of *The Quranic Concept of War* by Pakistani Army Brigadier General S. K. Malik - review by Myers, in *Parameters*, Winter 2006
    - The Quranic Concept of War and Terror, by Poole - 19 Jan 2007 discussion of Pakistani Brig. Gen. S. K. Malik's *The Quranic Concept of War*

- *The Quranic Concept of War and Terror*, by Poole - 19 Jan 2007 discussion of Pakistani Brig. Gen. S. K. Malik's *The Quranic Concept of War*

- The New Arab Way of War, by Layton, in *Proceedings*, March 2003

- ⇒ Comparing American and Chinese Negotiation Styles, video of presentation by Terry Hird, UC Berkeley, hosted by Google Videos

- ⇒ Culture and point of view, by Nisbett and Masuda, in *Proceedings of the National Academy of Sciences of the United States of America*, Sep 2003

- Occupations, Cultures, and Leadership in the Army and Air Force, by Mastroianni, in *Parameters*, Winter 2005-06

- Cultural Issues in Medation: Individualist and Collectivist Paradigms, by Wright, posted by USMC Center For Advanced Operational Culture Learning (CAOCL)

- ⇒ **Dimensions of Culture**, by Geert Hofstede
  - Creating Cultural Competence, by Geert Hofstede
    - cultural ratings and etiquette for over 50 countries and cultures/regions
    - based on survey of more than 100,000 people
      - Hofstede's Dimension of Culture Scales - ratings for the individual countries/cultures/regions
        - **Power Distance Index (PDI)** - focuses on the degree of equality, or inequality, between people in the country's society. A High Power Distance ranking indicates that inequalities of power and wealth have been allowed to grow within the society.
        - **Individualism (IDV)** - focuses on the degree the society reinforces individual or collective achievement and interpersonal relationships. A High Individualism ranking indicates that individuality and individual rights are paramount within the society.
        - **Masculinity (MAS)** - focuses on the degree the society reinforces, or does not reinforce, the traditional masculine work role model of male achievement, control, and power. A High Masculinity ranking indicates the country experiences a high degree of gender differentiation.
        - **Uncertainty Avoidance Index (UAI)** - focuses on the level of tolerance for uncertainty and ambiguity within the society - i.e. unstructured situations. A High Uncertainty Avoidance ranking indicates the country has a low tolerance for uncertainty and ambiguity.
        - **Long-Term Orientation (LTO)** - focuses on the degree the society embraces, or does not embrace, long-term devotion to traditional, forward thinking values. High Long-Term Orientation ranking indicates the country prescribes to the values of long-term commitments and respect for tradition.
      - Each country's ratings also include explanatory paragraphs for the five dimensions and how they apply to that country.

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- **Basic Human Values: Theory, Methods, and Applications**, by Shalom H. Schwartz, 2006
  - Schwartz Value Survey (SVS) ten basic values - from studies in more than 20 countries (with sampling in 67 countries) - text of article explains the difference between close terms (such as achievement and power; and conformity and tradition)
    1. **Self-Direction**. Independent thought and action; choosing, creating, exploring.
    2. **Stimulation**. Excitement, novelty, and challenge in life.
    3. **Hedonism**. Pleasure and sensuous gratification for oneself.
    4. **Achievement**. Personal success through demonstrating competence according to social standards.
    5. **Power**. Social status and prestige, control or dominance over people and resources.
    6. **Security**. Safety, harmony, and stability of society, of relationships, and of self.
    7. **Conformity**. Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms.
    8. **Tradition**. Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide the self.
    9. **Benevolence**. Preserving and enhancing the welfare of those with whom one is in frequent personal contact (the 'in-group').
    10. **Universalism**. Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature.
  - more sources on the SVS and its use

- **The Seven Cultures of Capitalism**, by Charles Hampden-Turner and Alfons Trompenaars, Doubleday, 1993
  - Compares cultural values of more than 40 countries (including US)
  - Six pairs of dimensions
    - Universalism vs. Particularism
    - Analyzing vs. Integrating
    - Individualism vs. Communitarianism
    - Inner-directed vs. Outer-directed Orientation
    - Achieved Status vs. Ascribed Status
    - Equality vs. Hierarchy

- The culture-cognition connection: Recent research suggests that Westerners and East Asians see the world differently–literally, by Winerman, at *APA Online*, American Psychological Association, Feb 2006
  - The researchers have found increasing evidence that East Asians, whose more collectivist culture promotes group harmony and contextual understanding of situations, think in a more holistic way. They pay attention to all the elements of a scene, to context and to the relationships between items. Western culture, in contrast, emphasizes personal autonomy and formal logic, and so Westerners are more analytic and pay attention to particular objects and categories.
  - Another difference between Westerners and Asians regards the fundamental attribution error–a mainstay psychological theory for the last 30 years that, it turns out, may not be so fundamental after all. The theory posits

analyzed, and compared or contrasted, based on a continuum and not "either-or" absolutes.

- So which of the models are appropriate for the military? Based on the different needs of the military audience and their level of interaction or impact on a local population, Klein's (2004) model and Weaver's (2000) model would work best. Klein's (2004) model can be utilized at the basic level, when just general orientation and awareness is needed. Klein's model looks at the U.S. culture and then places it in context of another culture. In addition, a discussion and military-relevant illustrations of stereotypes and ethnocentric thinking should be included.

- Technologies for Augmented Collaboration: Social Domain Issues (local copy), by Pierce et al, for 2006 CCRTS
  - Teams have always been important in military operations, but the nature of military teamwork is changing to accommodate an increasing number of missions in stability, security, transition, and reconstruction (SSTR). These missions often require that diverse, distributed experts from multinational forces, non-governmental organizations, and other government agencies work together.
  - GlobeSmart® Commander is an instructional tool designed to provide military teams performing command and control functions the information and skill they need to adapt to cultural influences on teamwork at the operational level (Sutton, 2003; Sutton & Cosenzo, 2004; Sutton & Edelmann, 2005; Sutton & Pierce, 2003; Sutton, Pierce, Burke, & Salas, in press). Six cultural dimensions are assessed by GlobeSmart® Commander (Sutton & Gundling, 2005). These dimensions reflect basic culturally-based values or orientations identified in the culture literature (e.g., Hofstede, 1980; Schwartz, 1992; Triandis, 1989; Trompenaars & Hampden-Turner, 1998). Following is a list of the dimensions included in GlobeSmart® Commander along with a short description of each dimension.

Dimension	Practical Implications
Independent – Interdependent	Shapes a preference for individual initiative and action, or for a more group-oriented approach that emphasizes the interests of the team as a whole.
Egalitarian – Status	Shapes a preference for mutual consultation in decision-making, or for greater deference to rank and hierarchy.
Risk – Restraint	Shapes a preference for rapid action and risk-taking, or for more cautious and calculated actions based on ample information.
Direct – Indirect	Shapes a preference for open and explicit communication, or for careful attention paid to context or to implicit meanings in a given message.
Task – Relationship	Shapes a preference for immediate attention to getting the job done, or for establishing strong and trusting personal relationships first.
Short Term – Long Term	Shapes a preference for making choices based upon a narrow time horizon, or for considering the impact that choices will have over a longer span of time.

  - While each of these dimensions was considered important in multinational team operations to operational level staff members in B-H, reported critical incidents tended to focus on the dimensions of independent-interdependent, egalitarian-status, and risk-restraint. These three dimensions, slightly redefined, seemed to be especially important in team performance (for a detailed review see Sutton & Pierce, 2003; Sutton, Pierce, Burke, & Salas, 2006).

- The Native Roots of Psychology in China: Sunzi and the School of Strategists as Pioneers of "Psychological Art" by Gawlikowski, at XVII International CongressInternational Association for Cross-Cultural Psychology, Xi'an, August 2-6, 2004

Other Sources

- Services such as Google's free 1,000 daily searches, automated
- Archives such as Google's 800 million UseNet discussions
- Blog searches/particulars, MySpace, YouTube
- OSC (nee FBIS) translated news
- Worldwide news sources -- compare to US coverage of same events/issues
- WWW Virtual Library and Library of Congress
- Dark Web and similar tools
- Wikipedia, as a starting point, not for attribution

Upcoming BIAC Aids

- Human Terrain page(s) – all sources, services, organizations

- Resources page – especially resources tailored to the BIA methodology steps